

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



540604

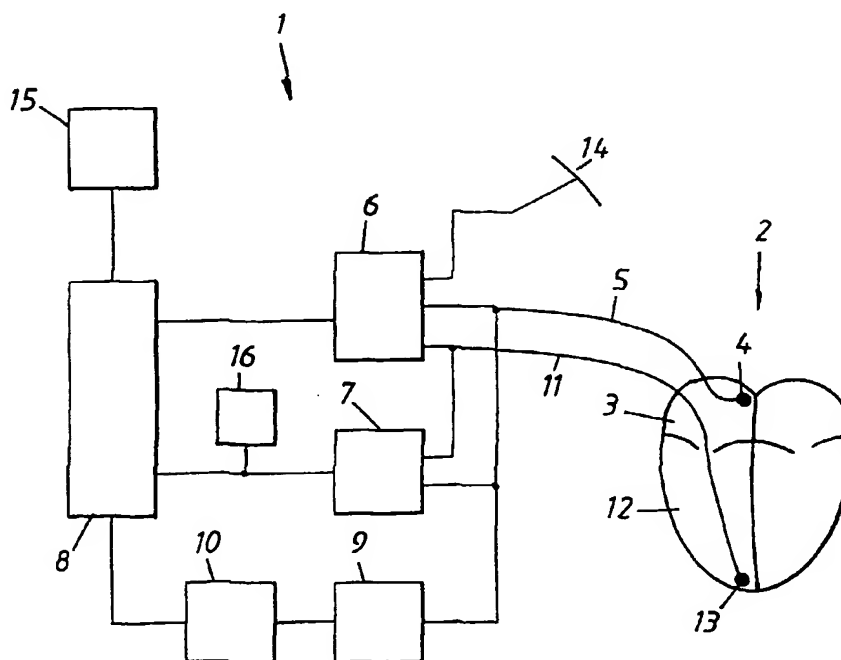
(43) International Publication Date  
8 April 2004 (08.04.2004)

PCT

(10) International Publication Number  
**WO 2004/028629 A1**

- (51) International Patent Classification<sup>7</sup>: A61N 1/368, 1/365, 1/37 // A61B 5/04
- (72) Inventor; and  
(75) Inventor/Applicant (for US only): HÖLJER, Carl-Johan [SE/SE]; Mossavägen 10, S-247 32 Lund (SE).
- (21) International Application Number: PCT/SE2003/001289
- (74) Common Representative: ST JUDE MEDICAL AB; Patent Department, Veddestavägen 19, S-175 84 Järfälla (SE).
- (22) International Filing Date: 19 August 2003 (19.08.2003)
- (81) Designated State (national): US.
- (25) Filing Language: English
- (84) Designated States (regional): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).
- (26) Publication Language: English
- (30) Priority Data: 0202882-7 30 September 2002 (30.09.2002) SE
- Published: — with international search report
- (71) Applicant (for all designated States except US): ST JUDE MEDICAL AB [SE/SE]; Veddestavägen 19, S-175 84 Järfälla (SE).
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HEART STIMULATOR DETECTING ATRIAL ARRHYTHMIA BY DETERMINING WALL DISTENSION BY IMPEDANCE MEASURING



(57) Abstract: An implantable dual chamber heart stimulator is comprising a mode switch for switching to a non P-wave synchronizing pacing mode when an atrial tachyarrhythmia is present. The pacing rate is adapted during atrial tachyarrhythmia to limit the atrial distension to a predetermined level. The atrial distension is measured during tachyarrhythmia through an impedance measurement that reflects the atrial volume.

WO 2004/028629 A1